AMENDMENTS TO THE CLAIMS

We claim:

1. (currently amended) A process for preparing maleic anhydride by oxidizing n-butane in the gas phase under heterogeneous catalysis with oxygen-containing gases over a vanadium-, phosphorus- and oxygen-containing catalyst in a reactor unit at a temperature in the range from 350 to 500°C, removing the maleic anhydride formed to form a gas stream which comprises unconverted n-butane and water and recycling at least a portion of the unconverted n-butane to the reactor unit, which comprises feeding to the reactor unit an inlet stream having an n-butane concentration of from 0.5 to 1.5% by volume and an oxygen concentration of from 5 to 21% by volume, establishing a pressure at the inlet to the reactor unit of from ~~0.4 to 2 MPa abs~~ 0.6 to 1 MPa abs, and converting from 40 to 100% of the n-butane from the inlet stream per reactor pass.

2. (original) A process as claimed in claim 1, wherein an inlet stream having an n-butane concentration of from 1 to 1.5% by volume is fed to the reactor unit.

3. (previously presented) A process as claimed in claim 1, wherein an inlet stream having an oxygen concentration of from 10 to 18% by volume is fed to the reactor unit.

4. (canceled)

5. (currently amended) A process as claimed in claim 1, wherein a GHSV of from 2000 to 10,000 h^{-1}, based on the volume of the inlet stream fed, normalized to 0°C and 0.1013 MPa abs, and based on the bed volume of the catalyst summed over all reaction zones, is established in the reactor unit via the flow rate of the inlet stream.

6. (previously presented) A process as claimed in claim 1, wherein the oxygen-containing gas used is air.

7. (currently amended) A process as claimed in claim 1, wherein the heterogeneously catalyzed gas phase oxidation is carried out in the presence of a volatile phosphorus compound.

8. (currently amended) A process as claimed in ~~any of claims 1 to 7~~ claim 1, wherein the reactor unit used is a fluidized bed reactor unit.

9. (currently amended) A process as claimed in ~~any of claims 1 to 7~~ claim 1, wherein the reactor unit used is a tube bundle reactor unit having at least one reaction zone cooled by a heat carrier medium.

10. (original) A process as claimed in claim 9, wherein a tube bundle reactor unit is used which has at least two reaction zones cooled by a heat carrier medium.

11. (currently amended) A process as claimed in ~~any of claims 1 to 10~~ claim 1, wherein at least 40% of the unconverted n-butane is recycled to the reactor unit.

12. (original) A process as claimed in claim 11, wherein from 40 to 80% of the unconverted n-butane is recycled to the reactor unit.

13. (currently amended) A process as claimed in ~~any of claims 1 to 12~~ claim 1, wherein maleic anhydride is removed from the gas stream withdrawn from the reactor unit and at least a portion of the gas stream depleted in maleic anhydride is recyled to the reactor unit.

14. (currently amended) A process as claimed in ~~either of~~ claim 2, wherein an inlet stream having an oxygen concentration of from 10 to 18% by volume is fed to the reactor unit.

15. (canceled)

16. (canceled)

17. (currently amended) A process as claimed in ~~any of claim 4~~ claim 2, wherein a GHSV of from 2000 to 10,000 h^{-1}, based on the volume of the inlet stream fed, normalized to 0°C and 0.1013 MPa abs, and based on the bed volume of the catalyst summed over all reaction zones, is established in the reactor unit via the flow rate of the inlet stream.

18. (currently amended) A process as claimed in ~~any of~~ claim 3, wherein a GHSV of from 2000 to 10,000 h^{-1}, based on the volume of the inlet stream fed, normalized to 0°C and 0.1013 MPa abs, and based on the bed volume of the catalyst summed over all reaction

zones, is established in the reactor unit via the flow rate of the inlet stream.

19. (currently amended) A process as claimed in claim 4, wherein a GHSV of from 2000 to 10,000 h^{-1}, based on the volume of the inlet stream fed, normalized to 0°C and 0.1013 MPa abs, and based on the bed volume of the catalyst summed over all reaction zones, is established in the reactor unit via the flow rate of the inlet stream.

20. (previously presented) A process as claimed in claim 2, wherein the oxygen-containing gas used is air.